

ABSTRACT OF THE DISCLOSURE

SCANNING AN ALLOWED VALUE INTO A GROUP OF LATCHES

1 During scan testing of logical and memory circuits, it is important to
2 prevent a scan test error resulting from simultaneous switching of the
3 values within chip logic. Scan testing, however, encompasses rapidly
4 scanning in values into a register to detect if the register is properly
5 functioning. A circuit is disclosed which looks at the n-1 values within the
6 register and determines if the next scan in value would cause contention. If
7 so, that value is blocked until the next scan in value would not cause
8 contention with the n-1 values within the register. Practically, the
9 invention will allow only allowed values into the register and may allow a
10 "hot one" value into the register every n-1 clock cycle. Feedback of the
11 values in the register is provided to a logical AND function to determine if a
12 differing bit value will be allowed to scan into the register.